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GENDER BASED DIFFERENCES IN BENEFIT FROM NOVEL ORAL ANTICOAGULANT DRUGS COMPARED TO WARFARIN IN ATRIAL FIBRILLATION: AN ANALYSIS OF PUBLISHED STUDIES

Poster Contributions
Hall C
Saturday, March 29, 2014, 10:00 a.m.-10:45 a.m.

Session Title: Arrhythmias and Clinical EP: State of the Art Anticoagulation for Atrial Fibrillation
Abstract Category: 4. Arrhythmias and Clinical EP: AF/SVT
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Introduction: Women develop atrial fibrillation at an older age and have a higher risk of stroke than men. Female gender is an independent risk factor for not being in the therapeutic range of warfarin in the recently published SAMe-TT2R2 score. Even within the therapeutic range of warfarin, women remain at higher risk of stroke. Novel oral anticoagulants (NOACs) provide stable level of anti-coagulant activity and are more effective than warfarin in non valvular atrial fibrillation. However the efficacy of NOACs in reducing stroke risk specifically in women is not known.

Methods: We analyzed published data from three major NOAC trials - RELY, ARISTOTLE and ROCKET AF. Event rate per year and risk of bleeding among men and women were analyzed.

Results: The three studies included 17336 women and 27995 men. Compared to warfarin, NOACs reduced the event rate in both men (1.88%vs 2.27%, p=0.02) and women (2.3% vs 3%, p=0.004). The number needed to treat was 143 in women and 256 in men. Women suffered lower bleeding rates with NOACs compared to warfarin(7.68% vs 8.75%, p=0.01) while men had similar bleeding rates with both drugs (9.4% vs 9.17%, p=0.5)

Conclusion: Women appear to derive more benefits in terms of increased efficacy and improved safety from NOACs compared to men. Prospective real world studies should study the impact of NOACs in reducing stroke risk in women with atrial fibrillation.